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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/670,760	09/27/2000	Luis Felipe Cabrera	MSFT-0176/150795.1	6145

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EXAMINER

THAI, HANH B

ART UNIT	PAPER NUMBER
2171	5

DATE MAILED: 05/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/670,760	CABRERA, LUIS FELIPE
	Examiner	Art Unit
	Hanh B Thai	2171

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on The Amendment dated 4/18/2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-34 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ . |

This is in response to the Amendment dated April 18, 2003.

DETAILED ACTION

1. Applicant's arguments with respect to claim1-34 have been considered but have not been found persuasive.
2. Examiner respectfully traverses applicant's primary argument(s).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-13, 15-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pongracz et al. (U. S. Patent no. 6,073,128) in view of Stevens (U. S. Patent no. 6,145,088).

Regarding claims 1 and 15, Pongracz discloses a method for generating backup files in a computer system, comprising:

- generating a full backup file corresponding to a first time for a set of objects in the computer system (see col.5, lines 3-21 and col. 1, lines 45-49, Pongracz);
- generating at least one incremental file for the set of objects after the first time (see col.6, lines 18-21 and col. 3, lines 64-67, Pongracz);

- identifying a target object within the set of objects for the generation of cumulative backup files (see col. 5, lines 60-66 and col. 3, lines 53-64); and
- generating at least one cumulative backup file corresponding to a second time, after the first time, for the target object (see column 1, lines 53-61, Pongracz).

Pongracz, however, does not disclose that the backup file is performed off-line. Stevens, on the other hand, discloses this limitation on (column 1, lines 49-56, Stevens). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Pongracz. The motivation of doing so would have been to provide relief to data loss (column 1, lines 49-56, Stevens).

Regarding claim 2, Pongracz/Stevens combination further discloses that the generating of the at least one cumulative backup file includes analyzing at least one incremental file generated between the first and second time (see column 2, lines 10-21, Pongracz).

Regarding claim 3 Pongracz/Stevens combination further discloses that the analyzing of at least one incremental file is performed in reverse chronological order, starting from the second time (see column 49-53, Pongracz).

Regarding claim 4, Pongracz/Stevens combination further discloses restoring the target object to the second time by processing the full backup file and the at least one cumulative backup file (see column 3, lines 64-67, Pongracz).

Regarding claim 5, Pongracz/Stevens combination further discloses that restoring the target object to a third time later than the second time by processing a full backup file, the at least one cumulative backup file and any incremental backup files generated between the second time and the third time (see column 1, lines 46-61, Pongracz).

Regarding claims 6-7, Pongracz/Stevens combination further discloses that the identifying includes identifying a related subset of files as the target object for a cumulative backup file (see column 3, lines 49-58, Pongracz).

Regarding claim 8, Pongracz/Stevens combination further discloses the identifying includes identifying a directory as the target object for a cumulative backup file (see column 3, lines 53-58, Pongracz).

Regarding claim 9, Pongracz/Stevens combination further discloses that a user identifies the target object (see column 3, lines 18-19 and column 5, lines 3-21, Pongracz).

Regarding claim 10, Pongracz/Stevens combination further discloses the monitoring and analyzing restore operations in the computer system (see column 3, lines 45-53, Pongracz).

Regarding claim 11, Pongracz/Stevens combination further discloses the identifying of the target object is designed to meet a condition of bounded restore time for the target object (see column 7, line 60 to column 8, line 8, Pongracz).

Regarding claim 12, Pongracz/Stevens combination further discloses controlling the frequency of generating at least one of a full, incremental and cumulative backup (see column 1, line 65 to column 2, line 9, Pongracz).

Regarding claim 13, Pongracz/Stevens combination further discloses a computer-readable medium having computer-executable instructions (Fig. 1 of Pongracz).

Regarding claims 16-21, the elements of these claims have been rejected in the analysis above and these claims are rejected on that basis.

Regarding claims 22, 32 and 34, Pongracz discloses a computer system (Fig. 1) that the storage of backup information for a target object in the form of full, incremental and cumulative backup information; wherein the full backup information is generated at a first time and the cumulative backup information is generated at a second time (column 1, lines 45-56, Pongracz).

Pongracz, however, does not disclose that plurality of servers connected to network and a plurality of storage components for the storage of backup information wherein the backup can be performed off-line. Stevens, on the other hand, discloses this limitation on (Fig. 2 and column 1, lines 49-56, Stevens). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Pongracz. The motivation of doing so would have been to provide relief to data loss (column 1, lines 49-56, Stevens).

Regarding claims 23 and 24, the limitations of these claims have been noted in the rejection of claim 22. Pongracz, however, does not reconstructing of the target object. But it is inherent to use the system Pongracz to reconstruct the object to the second time includes processing at least one cumulative backup file associated with the second time and a full backup file associated with the first time. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Pongracz. The motivation of doing so would have been to provide an efficient backup system.

Regarding claims 25-31 and 33, the elements of these claims have been rejected in the analysis above and these claims are rejected on that basis.

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pongracz et al. (U. S. Patent no. 6,073,128) in view of Stevens (U. S. Patent no. 6,145,088) and further view of Fletcher et al. (U. S. Patent no. 6,038,379).

Regarding claim 14, the limitations of this claim have been noted in the rejection of claim 1. In addition, Pongracz/Stevens combination does not disclose “the storage block mappings for the target object” and “the change is stored in the format of MTF”.

Fletcher, however, discloses this limitation on (column 6, lines 10-19 and column 8, lines 18-36, Fletcher). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Pongracz and Stevens. The motivation of doing so would have been to support the full backup and recovery.

Response to Arguments

Applicant argues, none of Pongracz et al., Stevens and Fletcher et al. teach or suggest generating a full backup file for a set of objects, then generating incremental file(s) for the set of objects, identifying a target object within the set of objects for the generation of cumulative backup file(s) and gerating those cumulative backup file(s) for the target object off-line” (response 4/18/03, page 11). The examiner respectively disagrees because Pongracz and Stevens, in combination, teach all of the claimed limitations. For example, Pongracz teaches generating a full backup file for a set of objects (see col.5, lines 3-21, Pongracz), then generating incremental file(s) for the set of objects (col.6, lines 18-21, Pongracz), and identifying a target object within the set of objects for the generation of cumulative backup file(s) (see col. 5, lines 60-66 and col.6, lines 1-27, pongracz). And Stevens supply the evidence that it was well known to do backup off-line (see col.1, lines 49-56, Stevens) as cited in the previous action.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh B Thai whose telephone number is 703-305-4883. The examiner can normally be reached on 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-9099 for regular communications and 703-746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Hanh Thai
Art unit 2171
May 15, 2003



SAFET METJAHIC
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100